AECOM

December 4, 2015

Mr. Mike Romero
Oregon Department of Environmental Quality
700 NE Multnomah St., Suite 600
Portland, OR 97232

Re: Phillips 66 Outfall Basin 22 Video Scope Work Plan
Phillips 66 Portland Terminal
5528 NW Doane Avenue

Dear Mr. Romero,

AECOM is pleased to submit this Work Plan on behalf of Phillips 66 to the Oregon Department of Environmental Quality (DEQ) in response to the City of Portland Bureau of Environmental Services (BES) Technical Memorandum No. OF 22-2 submitted in July 2015.

BACKGROUND

Recent observations of petroleum sheen at Outfall 22 (OF-22) along the Willamette River (Figure 1) in Portland, Oregon prompted a meeting on April 22, 2015 with BES, DEQ, the United States Coast Guard (USCG), Chevron representatives, and Phillips 66 representatives. BES agreed to coordinate with the USCG to complete a comprehensive investigation in an effort to identify potential sheen sources contributing to the OF-22 basin. The BES investigation started on May 27, 2015 and was completed on June 3, 2015. The BES investigation consisted of collecting dry-weather flow samples, inline solids samples, in-river sediment samples, wipe samples, and conducting video surveys focused primarily on the main storm line located between NW St. Helens Road and NW Front Avenue along NW Doane Avenue and laterals from the neighboring Chevron and Phillips 66 facilities (Figure 1).

Complete results of the BES investigation are presented in Technical Memorandum No. OF 22-2. Of particular concern for Phillips 66 are the results associated with three points along the main storm line where laterals from the Phillips 66 property enter the main storm line. The three points of concern are described below and are shown on Figure 1.

- Lateral 1 – Phillips 66 lateral entering the main storm line at manhole AAM075.
- Lateral 2 – Phillips 66 lateral entering the main storm line at Wye APA018 located between manhole AAM076 and manhole AAM086. In addition, manhole APA016 upstream along Wye APA018 where three private lines from the Phillips 66 facility enter the system.

- Lateral 3 – Phillips 66 lateral entering the main storm line at manhole AAP794. In addition, manhole ANV453 upstream along the Phillips 66 lateral which enters at manhole AAP794.

Inline solids, dry-weather flow, and wipe samples near the three laterals were collected during the BES investigation. Diesel and lube oil were detected in inline solid samples near Lateral 1 and Lateral 3. Total polycyclic aromatic hydrocarbons (PAHs), diesel, and lube oil were detected in dry-weather flow samples collected near Laterals 1 and 2, while only total PAHs were detected in the dry-weather flow sample near Lateral 3. Diesel, gasoline, and lube oil were detected in wipe samples near Laterals 2 and 3.

WORK PLAN OBJECTIVES

The objectives of the activities presented in this Work Plan are to identify potential sources associated with the Phillips 66 laterals entering the main storm line along NW Doane Avenue which may be contributing to dry-weather flow for Laterals 1, 2, and 3 and to identify potential sources contributing to the diesel, gasoline, and lube oil detected in wipe samples near Laterals 2 and 3.

The objectives will be achieved by cleaning the laterals via line jetting with a vacuum truck and verifying the lines have been cleaned using a video scope. In addition, the video scope will be used to check conditions within the laterals and document potential conditions which may be contributing to dry-weather flows and/or conditions associated with the wipe sample detections during the BES investigation.

PRELIMINARY PLANNING

A Health and Safety Plan (HASP) will be revised for field personnel and subcontractors as required by the Occupational Safety and Health Administration (OSHA). The HASP will describe project-specific health and safety procedures to protect personnel from potential hazards during field activities.

The City of Portland will be notified and approval received prior to opening manholes and interacting with the City of Portland storm line.

LINE JETTING AND VIDEO SCOPING

Field activities will be performed by starting with the upstream lateral, Lateral 3, followed by Lateral 2 and finishing with Lateral 1. Specific steps for the individual laterals are described below. A summary of the potential concerns, proposed actions, and anticipated schedule are provided in Table 1.

Lateral 3

The objectives for Lateral 3 are to identify potential sources of dry-weather flow and potential sources contributing to the diesel, gasoline, and lube oil detected in the wipe sample collected from manhole ANV453 during the BES investigation. Lateral 3 will be cleaned by line jetting using a vacuum truck in two phases. Prior to the start of any line jetting, the piping will be evaluated and the pressure adjusted as to not damage infrastructure. The first phase will clean approximately 20 feet upstream the lateral from manhole ANV453. The second phase will clean from manhole AAP794 to manhole ANV453.

The cleaning will be verified using a video scope and the conditions of Lateral 3 will be documented, particularly in manhole ANV453 where BES noted evidence of groundwater infiltration and the location of wipe sample 22_31 where diesel, gasoline, and lube oil were detected during the BES investigation.

Lateral 2

The objectives for Lateral 2 are to identify potential sources of dry-weather flow and potential sources contributing to the diesel, gasoline, and lube oil detected in the wipe sample collected just upstream from Wye APA018 during the BES investigation. Lateral 2 will be cleaned by line jetting using a vacuum truck in three phases. Prior to the start of any line jetting, the piping will be evaluated and the pressure adjusted as to not damage infrastructure. The first phase will clean from manhole APA016 to approximately 15 feet, or until a valve is reached, upstream each of the three lines entering manhole APA016. The second phase will clean from manhole AAM076 to manhole APA016. The third phase will clean from manhole AAM076 along the main storm line approximately 10 feet upstream from Wye APA018.

The cleaning will be verified using a video scope and the conditions of Lateral 2 will be documented, particularly surrounding the area of Wye APA018 where wipe sample 22_20 detected diesel, gasoline, and lube oil during the BES investigation.

Lateral 1

The objective for Lateral 1 is to identify the source of dry-weather flow. Lateral 1 will be cleaned by line jetting using a vacuum truck from manhole AAM075 to the valve located approximately 30 feet upstream along the lateral. Prior to the start of any line jetting, the piping will be evaluated and the pressure adjusted as to not damage infrastructure. The cleaning will be verified using a video scope and the conditions of Lateral 1 will be documented.

WASTE MANAGEMENT

Water and sediment will be collected by and stored in the vacuum trucks used for the line jetting activities. The water and sediment will be properly transported and disposed according to local and federal laws and regulations. Other miscellaneous wastes generated during field activities will be disposed in an approved dumpster.

CONCLUSIONS

Results of the line jetting and video scoping will be submitted to DEQ, BES, and EPA as part of the continued Source Control Evaluation associated with the Phillips 66 facility. The results will be used to determine the next course of action with regards to OF-22 and the Phillips 66 facility.

AECOM

Sincerely,
AECOM

Kevin Remley
Environmental Scientist

Thomas J. Bialobok
Program Manager

Cc:
Ken Theissen, DEQ
Eva DeMaria, EPA
Tim Bishop, Chevron Environmental Management Company
Jerry Henderson, Chevron Americas Products
Richard Soloman, Phillips 66 Company
Nick Giotta, Phillips 66 Company
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Attachments:

Figure 1 – Stormwater System Map
Table 1 – Summary of Potential Concerns and Proposed Actions

Table 1
Phillips 66 Outfall Basin 22 Video Scope Work Plan
Summary of Potential Concerns and Proposed Actions

Summary of Potential Concerns and Proposed Actions			
Concern	**Proposed Action**	**Anticipated Schedule**	**Deliverables**
Lateral 1			
Dry-Weather Flow	Perform line jetting and video scope to identify source of dry-weather flow[2]	1Q / 2Q 2016[1]	Photo documentation of observations
Lateral 2			
Dry-Weather Flow	Perform line jetting and video scope to identify source of dry-weather flow[2]	1Q / 2Q 2016[1]	Photo documentation of observations
Surface Wipe Sample Detections	Perform line jetting and video scope to identify source[2]	1Q / 2Q 2016[1]	Photo documentation of observations
Lateral 3			
Dry-Weather Flow	Perform line jetting and video scope to identify source of dry-weather flow[2]	1Q / 2Q 2016[1]	Photo documentation of observations
Surface Wipe Sample Detections	Perform line jetting and video scope to identify source[2]	1Q / 2Q 2016[1]	Photo documentation of observations

Notes:

1. Anticipated schedule is dependent upon access to City of Portland manholes located along NW Doane Avenue. Schedule is also dependant upon dry-weather conditions.
2. Potential actions and schedule following video scope work are dependent upon information gathered as part of initial inspection.